

The energy conundrum!

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Some things being done by governments lack scientific credibility and are frightening from an environmental perspective. A classical example is provided by the Federal Government's energy policy, as the Coalition engages in mental acrobatics to avoid using terms and concepts which are anathema to either its extreme right wing, or, heaven forbid, in some way favoured by the Opposition. This is a pathetic way to deal with a policy which has global dimensions.

Confusion reigns and renewables get wet! The Federal Government accepted 49 of the Finkel report's 50 recommendations. The Clean Energy Target (CET), without which business-certainty is unattainable and the pragmatic Finkel approach must founder, is no more! There is no scientific justification for inaction over emissions, yet the Coalition stumbles along in its self-induced nightmare! We, in contrast, are faced with an environmental nightmare comprising climate change fanned by Australia's direct and indirect contributions to global greenhouse gas emissions.

Why was the CET a stumbling block for the Federal Government? The answer lies in the government's support for 'Adani' and the destructive Carmichael Mine in the Galilee Basin, its persistent support for oxymoronic 'clean coal', its wish to extend the life of yesteryear's coal-fuelled power station and, having discovered in the AEMO reports¹ that there are low probabilities of power shortages in south-eastern Australia, its argument that these concerns supersede Finkel's report². Thank you and goodnight Dr Finkel!

National Energy Guarantee (NEG). The NEG's emphasis is on energy-security (reliability) and affordability within the broader context of meeting Australia's underwhelming commitments to the Paris Agreement. The guarantee is largely predicated on coal-fired baseload, coupled with gas and 'stabilized' renewables to handle demand-peaks. There will be **no more** subsidies for renewables under the Renewable Energy Target (RET³) after 2020; apparently, renewables are too successful to continue needing help. In contrast, the diverse subsidies for coal⁴ will remain!

Somewhat disingenuously, the NEG'S 'guarantee' necessitates reaching agreement with all states and territories about an emissions reduction target (possibly 26% on 2005 levels by 2030) and trajectory for the electricity industry. Assuming a viable agreement is forthcoming, the NEG's environmental and reliability 'guarantees' will be imposed on retailers and selected large energy users, while large coal-fired generators will be pressured to delay planned closures. The environmental and reliability 'guarantees' should ensure that retailers have a power-source spectrum comprising low-emissions sources to meet environmental commitments, rapid-response dispatchable sources (e.g., gas-powered systems and battery storage) for sudden demand-peaks, and the traditional coal-fired baseload. Nuclear power, another form of baseload, is unsurprisingly not mentioned.

Affordability, that is whether the consumer will win or lose, is in the realm of conjecture. Optimism from Frydenberg⁵, uncertainty from Turnbull⁶ and doubts from Labor have little merit. This is because the NEG is a hastily assembled concept plan which, on currently available data, has little provision for downward pressure on pricing, will not ensure **long-term** bi-partisan acceptance, and is therefore unlikely to create business-certainty⁷.

The NEG claims to be agnostic about energy sources. Yet it strongly prescribes coal-fired baseload whilst effectively hobbling renewables. For example, under the anticipated emissions reduction target, small-scale photo-voltaic uptake could crowd-out large-scale renewable development. Only by strengthening the 2030 target within the electricity industry will there be sufficient incentive for large-scale renewable development and a likelihood of Australia's total emissions meeting the Paris commitment⁸.

Nuclear power. Whenever 'renewables' are in the news, exponents of nuclear power generation (NPG), such as The Minerals Council of Australia⁹, become vociferous. Yet,

even disregarding the environmental risks associated with NPG, the economics of NPG do not make sense; sun and wind are cheaper than uranium! In the UK, the development cost of new wind farms is around £55 (~A\$93) per megawatt-hour, whereas the Hinkley Point Nuclear plant has a locked-in cost of £92 (~A\$155) per megawatt-hour¹⁰. Similarly, despite all the uncertainties associated with predictions, US data suggest that the costs of solar photovoltaics and on-shore wind power compare favourably with nuclear generation¹¹, do not have very long outages when breakdowns or accidents occur, and do not encounter the intense opposition from local populations. It is Unsurprisingly, NPG's contribution to total power generation is predicted to steadily decline as many OECD countries adopt policies which cap it or phase it out¹².

Australia has at least got it right in relation to prohibiting nuclear power generation. In this context, the views of the Commonwealth Grants Commission (the independent body which carves up the GST pie) are extremely concerning. It has indicated that failing to develop a state's resources (e.g., coal-seam gas) could become a basis for reducing a state's GST reimbursement; the possibility has received endorsement by Mathias Cormann and could equally be applied to bans on mining uranium¹³.

My conclusion. Despite contrary assurances¹⁴, the government has seemingly abandoned promoting renewables and meeting Australia's international commitments. The manipulation associated with release of the NEG involves a skilfully managed stratagem, the extent of which may only become clear when/if the NEG is implemented; perhaps akin to Turnbull's version of the NBN! It is regrettable that short-term political expediency may once again trump long-term evidence-based planning, not least because, after years of nightmarish uncertainty, people and business are prepared to clutch at straws!

¹ <https://www.aemo.com.au/Media-Centre/AEMO-advice-to-the-Commonwealth-government>

² <http://www.abc.net.au/7.30/we-cant-get-stuck-in-the-religion-of-renewables:/8943104>

³ <http://www.environment.gov.au/climate-change/government/renewable-energy-target-scheme>
<http://www.abc.net.au/news/2017-02-23/australian-renewable-energy-target-explained/8290460>

⁴October Hut News pp5-6 at http://www.bluemountains.org.au/documents/hutnews/1710_Hutnews.pdf

⁵ <https://www.theguardian.com/australia-news/2017/oct/22/frydenberg-absolutely-confident-energy-prices-will-fall-but-gives-no-guarantee>

⁶ <https://www.theguardian.com/australia-news/2017/oct/17/malcolm-turnbull-convinces-party-to-unite-on-energy-policy>

⁷ <http://reneweconomy.com.au/bnef-says-neg-could-deliver-42-renewables-by-2030-same-as-finkel-47103/>
<https://www.theguardian.com/australia-news/2017/oct/18/what-is-the-national-energy-guarantee-explainer>

⁸ This paragraph owes much to the references in end-note 8; their use is hereby acknowledged.

⁹ http://www.minerals.org.au/file_upload/files/media_releases/170831_Removing_the_prohibition_on_nuclear_power_September_2017_.pdf

¹⁰ <http://www.smh.com.au/environment/climate-change/tide-has-turned-global-rating-agency-says-climate-economics-trump-politics-20171012-gyzhey.html>

¹¹ https://www.eia.gov/outlooks/aeo/pdf/electricity_generation.pdf

¹² <https://www.eia.gov/todayinenergy/detail.php?id=31192>

¹³ <https://www.theguardian.com/australia-news/2017/oct/01/gst-could-be-used-to-force-states-to-develop-gas-cormann-says>

¹⁴ <http://www.smh.com.au/federal-politics/political-news/path-cleared-for-release-of-turnbulls-reliable-energy-package-20171012-gyzhu4.html>